

Claims

[c1] What is claimed is:

1. A bridge controller comprising:

an integrated drive electronics (IDE) slave interface for connecting a first system;

a universal serial bus (USB) interface for controlling a USB device; and

a control unit electrically connected to the IDE slave interface and the USB interface for bridge controlling transmission data, commands, and status between the IDE slave interface and the USB interface.

[c2] 2. The bridge controller of claim 1 wherein the IDE slave interface is electrically connected to the USB interface.

[c3] 3. The bridge controller of claim 1 wherein the USB interface is a USB host interface.

[c4] 4. The bridge controller of claim 1 wherein the USB interface is a USB on-the-go (OTG) interface.

[c5] 5. The bridge controller of claim 1 wherein the control unit is an embedded microprocessor.

[c6] 6. The bridge controller of claim 1 wherein the control

unit is a programming code.

- [c7] 7. The bridge controller of claim 1 wherein the control unit is a state machine.
- [c8] 8. The bridge controller of claim 1 wherein the control unit is further capable of transforming an IDE transmission data, command, or status inputted from the IDE slave interface into a USB transmission data, command, or status and outputting it to the USB interface; and transforming a USB transmission data, command, or status inputted from the USB interface into an IDE transmission data, command, or status, and outputting it to the IDE slave interface.
- [c9] 9. The bridge controller of claim 1 wherein the first system is a chipset of an audio and video (AV) system.
- [c10] 10. The bridge controller of claim 1 wherein the first system is a chipset of an information system.
- [c11] 11. The bridge controller of claim 1 wherein the first system is a chipset of a video compact disk(VCD) player.
- [c12] 12. The bridge controller of claim 1 wherein the first system is a chipset of a digital versatile disk (DVD) player.
- [c13] 13. The bridge controller of claim 1 wherein the first

system is a chipset of a portable audio and video system.